



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,972	09/24/2001	Martin E. Schwab	10200-003-99	7264

20583 7590 08/28/2003

PENNIE AND EDMONDS  
1155 AVENUE OF THE AMERICAS  
NEW YORK, NY 100362711

EXAMINER
----------

NICHOLS, CHRISTOPHER J

ART UNIT	PAPER NUMBER
----------	--------------

1647

DATE MAILED: 08/28/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/830,972

Applicant(s)

SCHWAB ET AL.

Examiner

Christopher Nichols, Ph.D.

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-97 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-97 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
3. According to PCT Rule 13.2, unity of invention exists only when the shared same or corresponding technical feature is a contribution over the prior art. The inventions listed as Groups 1-31 do not relate to a single general inventive concept because they lack the same or corresponding special technical feature. The technical feature of Group 1 is a purified Nogo protein which is shown Spillmann *et al.* (24 July 1998) "Identification and Characterization of a Bovine Neurite Growth Inhibitor." (bNI-220)." Journal of Biological Chemistry **273**(30); 19283-19293 to lack novelty or inventive step, purified bNI-220 (Figure 8; a Nogo protein, see pp. 10 of the Specification) and does not make it a contribution over the prior art.
4. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.  
  
Group 1, claim(s) 1-21, 50, 51, and 54 (each in part), drawn to a Nogo protein comprising **SEQ ID NO: 2**.  
  
Group 2, claim(s) 1-21, 52, 53, and 55 (each in part), drawn to a Nogo protein comprising **SEQ ID NO: 29**.  
  
Group 3, claim(s) 1-21 (each in part), drawn to a Nogo protein comprising **SEQ ID NO: 32**.

Art Unit: 1647

Group 4, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 1**.

Group 5, claim(s) 22-40, 56, 57, 60, 61, and 62 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid encodes **SEQ ID NO: 2**.

Group 6, claim(s) 22-40, 58, 59, 60, 61, and 62 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid encodes **SEQ ID NO: 29**.

Group 7, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 28**.

Group 8, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 32**.

Group 9, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 33**.

Group 10, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 35**.

Art Unit: 1647

Group 11, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 36**.

Group 12, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 37**.

Group 13, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 38**.

Group 14, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 39**.

Group 15, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 40**.

Group 16, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 41**.

Group 17, claim(s) 22-40 (each in part), drawn to a method of producing a Nogo protein comprising an isolated nucleic acid, vectors, and recombinant host cells comprising same wherein said isolated nucleic acid is **SEQ ID NO: 42**.

Art Unit: 1647

Group 18, claim(s) 41-43, drawn to a method of treating a subject with a neoplastic disease of the central nervous system comprising administering to the subject a therapeutically effective amount of a Nogo protein or fragment thereof.

Group 19, claim(s) 44, drawn to a method of treating a subject with *damage to the central nervous system* comprising administering to the subject a therapeutically effective amount of a ribozymes or an antisense Nogo nucleic acid.

Group 20, claim(s) 45, drawn to a method of *inducing regeneration or sprouting of neurons* in a subject comprising administering to the subject a therapeutically effective amount of a ribozymes or an antisense Nogo nucleic acid.

Group 21, claim(s) 46, drawn to a method of *promoting structural plasticity of the central nervous system* of a subject comprising administering to the subject a therapeutically effective amount of a ribozymes or an antisense Nogo nucleic acid.

Group 22, claim(s) 47-49, drawn to a recombinant non-human animal.

Group 23, claim(s) 63, 64, 65, 67, 68, 72-75, 77, 78, 80-85, 87, 91-93, and 95-97 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 2**.

Group 24, claim(s) 63-65, 69, 72-74, 77, 80-85, 88, 91-93, and 96 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 29**.

Group 25, claim(s) 63-65, 70, 72-74, 77, 80-85, 89, 91-93, and 96 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 32**.

Art Unit: 1647

Group 26, claim(s) 63-65, 71-74, 77, 80-85, 90-93, and 96 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 33**.

Group 27, claim(s) 64, 66, 72, 76, 82, 86, 91, and 94 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 43**.

Group 28, claim(s) 64, 66, 72, 76, 82, 86, 91, and 94 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 44**.

Group 29, claim(s) 64, 66, 72, 76, 82, 86, 91, and 94 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 45**.

Group 30, claim(s) 64, 66, 72, 76, 82, 86, 91, and 94 (each in part), drawn to a method of obtaining polyclonal antibodies to a protein, wherein said protein consists of **SEQ ID NO: 46**.

Group 31, claim(s) 79, drawn to a an isolated antiserum sample.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, separate search requirements, and/or different classification, restriction for examination purposes as indicated is proper.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

Art Unit: 1647

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

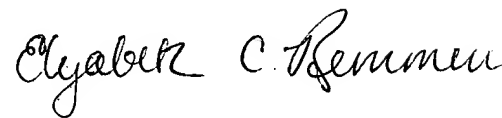
### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Christopher James Nichols, Ph.D.** whose telephone number is 703-305-3955. The examiner can normally be reached on Monday through Friday, 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gary Kunz, Ph.D.** can be reached on 703-308-4623. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications. The fax phone numbers for the customer service center is 703-872-9305

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

CJN  
August 25, 2003



**ELIZABETH KEMMERER  
PRIMARY EXAMINER**